



BMA BIOMEDICALS

**Monoclonal Antibody to Human CD41/CD61
GPIIb-IIIa; Melanoma Associated Endothelial Cell Marker**

Monoclonal antibody A 10-33/1 recognizes endothelial cells in various human and bovine organs (lung, liver) and endothelial cell cultures. It is useful for the characterization of primary melanomas, particularly in relation to prognosis of metastasis, and in combination with macrophage marker 25F9 (product T-1016). This antibody reacted strongly with purified GPIIb-IIIa (CD41/CD61 or α IIb β 3) which is expressed on platelets but not on endothelial cells. The antibody also reacted strongly with integral membrane proteins extracted from platelets, but not with thrombospondin. Immunoprecipitation with tissue from human lung carcinoma revealed two bands of 50 and 60kDa m.w., respectively, under reduced conditions, and 50 and 120kD, respectively, under non-reducing conditions. CD61 (β 3), which is strongly expressed on platelets and endothelial cells in combination with CD51 (α v, vitronectin receptor) and shares the β 3 subunit with GPIIb-IIIa, has molecular weights of 90 and 110kD, respectively, under non-reducing and reducing conditions.

TECHNICAL AND ANALYTICAL CHARACTERISTICS

Product Number:	T-1116 (Lot 02PO9005)
Clone:	A10-33/1
Host species, isotype:	Mouse IgG1
Quantity:	60 μ g
Format:	Affinity purified, lyophilized. Reconstitute by adding 0.5ml distilled water. This stock solution contains 0.12mg/ml IgG, phosphate buffered saline pH 7.2 (PBS), 10mg/ml bovine serum albumin (BSA) as a stabilizer and 0.01% Thimerosal as a preservative.
Stability:	Original vial: 1 year at 4° - 8°C from date of purchase. Stock solution and aliquots thereof: 1 year at -20°C. Avoid freeze-thaw cycles.
Applications:	Tested for immunohistochemistry (IHC); has been reported to work in FACS. Approximate working dilution for IHC: Frozen sections: 0.5 - 1 μ g/ml (1:200) Paraffin sections: does not react with routinely processed paraffin sections Optimal dilutions should be determined by the end user Suggested positive control: Human placenta Please see www.bma.ch for protocols and general information
Immunogen:	Human melanoma cell lines

Antigen, epitope:	The antigen is GPIIb-IIIa located on the cell surface, the epitope has not been further characterized.
Antigen distribution:	Isolated cells: The antigen is found on the surface of isolated human, bovine and murine endothelial cells from various organs. It is also found on various tumorous cells such as melanoma, teratoma, neuroblastoma and carcinoma cells. The antigen is absent on glioblastoma and on T and B lymphoblastoid cells Tissue sections: The antigen is located on endothelial cells of large vessels of the liver where it is more pronounced in veins than in arteries. In contrast to the liver, the antigen is found on endothelial cells of capillaries in the lung, gall bladder and skin. The antigen can also be found on melanoma, especially in metastasizing melanomas, and in carcinomas. Reactions of A 10-33/1 with nervous tissue have been reported.
Specificity:	Human: Endothelial cells of various organs. Other: Bovine and murine endothelial cells.

Selected references

Brueggen, J. & Sorg, C.: Detection of phenotypic differences on human malignant melanoma lines and their variant sublines with monoclonal antibodies. *Canc. Immunol. Immunother.* **15**, 200-205 (1983).

Suter, L. et al.: Heterogeneity of primary and metastatic human malignant melanoma as detected with monoclonal antibodies in cryostat sections of biopsies. *Canc. Immunol. Immunother.* **16**: 53-58 (1983).

For in vitro research only. This product contains Thimerosal as a preservative.